

WHAT IS CLAIMED IS:

1. A network comprising:
an audio signal producing device;
a content distributor communicatively coupled to said audio signal producing device;
a router;
a network communication medium communicatively coupling said content distributor and said router; and
a plurality of addressable loudspeakers communicatively coupled to said network communication medium;
wherein each of said addressable loudspeakers are configured to function as a network peripheral in said network.
2. The network of claim 1, wherein said addressable loudspeaker further comprises:
a modem communicatively coupled to said network communication medium;
a signal amplifier communicatively coupled to said modem; and
a speaker communicatively coupled to said signal amplifier;
wherein said modem is configured to be assigned a unique network identification.
3. The network of claim 2, wherein said unique network identification comprises one of an Internet protocol (IP) address or an Ethernet address.
4. The network of claim 3, wherein said content distributor further comprises a modulator configured to packetize audio signals received from said audio signal producing device.
5. The network of claim 4, wherein said content distributor is further configured to route said packetized audio signals to said addressable loudspeakers through said router.

6. The network of claim 2, wherein each of said addressable loudspeakers further comprises a microphone communicatively coupled to said modem.

7. The network of claim 6, wherein said addressable loudspeakers are configured to:

measure a test tone; and

transmit said measured test tone to said audio signal producing device.

8. The network of claim 1, wherein said audio signal device comprises a stereo receiver.

9. The network of claim 8, wherein said audio signal device is communicatively coupled to one of a video cassette recorder, a digital video disk player, a tape player; a compact disk player, an MP3 player, or a phonograph player.

10. The network of claim 1, wherein said network communication medium further comprises a power line based network medium.

11. The network of claim 1, wherein said network communication medium further comprises one of a radio frequency based medium, an infrared signal based medium, a wireless based medium, a phone line based medium, a coaxial cable based medium, or a fiber optic based medium.

12. The network of claim 1, wherein said plurality of addressable loudspeakers are disposed in multiple rooms of a house.

13. The network of claim 1, wherein said plurality of loudspeakers comprises a surround sound configuration.

14. The network of claim 1, wherein said content distributor is further configured to:

receive an audio signal from said audio signal producing device;
generate a user interface; and
packetize said audio signal based on a selection made from said user interface.

15. The network of claim 14, wherein said user interface is configured to allow a user to selectively route said audio signal to one or more of said addressable loudspeakers operating in a selectable mode;

wherein said selectable mode includes one of an OFF mode, a monaural mode, a stereo mode, a surround left mode, or a surround right mode.

16. An addressable loudspeaker comprising:
a modem configured to be communicatively coupled to a network communication medium;

a signal amplifier communicatively coupled to said modem; and

a speaker communicatively coupled to said signal amplifier;

wherein said modem is configured to be assigned a unique network identification.

17. The addressable loudspeaker of claim 16, wherein said unique network identification comprises one of an Internet protocol (IP) address or an Ethernet address.

18. The addressable loudspeaker of claim 16, wherein said addressable loudspeaker further comprise a microphone communicatively coupled to said modem.

19. The addressable loudspeaker of claim 18, wherein said addressable loudspeaker is configured to measure a speaker test tone.

20. The addressable loudspeaker of claim 19, wherein said modem is further configured to transmit said test tone measurement to a network device.

21. The addressable loudspeaker of claim 16, wherein said modem is configured to receive a plurality of packetized audio signals transmitted over a power line based network communication medium.

22. The addressable loudspeaker of claim 21, wherein said amplifier is powered by a signal received from said power line based network communication medium.

23. The addressable loudspeaker of claim 22, wherein said power line based network communication medium comprises a home power system.

24. The addressable loudspeaker of claim 16, wherein said modem is configured to receive audio signals from one of a radio frequency based medium, an infrared signal based medium, a wireless based medium, a phone line based medium, a coaxial cable based medium, or a fiber optic based medium.

25. The addressable loudspeaker of claim 16, wherein said modem is configured to:

receive a plurality of packetized analog signals; and
demodulate said packetized signal into a continuous analog audio signal.

26. The addressable loudspeaker of claim 24, wherein said amplifier is configured to amplify said continuous analog audio signal to a level sufficient to drive said speaker.

27. A surround sound system comprising:
a receiver;
a content distributor communicatively coupled to said receiver;
a router;
a system communication medium communicatively coupling said content distributor and said router; and
a plurality of addressable loudspeakers communicatively coupled to said system communication medium;

wherein each of said addressable loudspeakers are configured to be independently addressed by said content distributor.

28. The surround sound system of claim 27, wherein said addressable loudspeaker further comprises:

a modem communicatively coupled to said system communication medium;
a signal amplifier communicatively coupled to said modem; and
a speaker communicatively coupled to said signal amplifier;
wherein said modem is configured to be assigned a unique network identification.

29. The surround sound system of claim 28, wherein said unique network identification comprises one of an Internet protocol (IP) address or an Ethernet address.

30. The surround sound system of claim 29, wherein said content distributor further comprises a modulator configured to both packetize audio signals received from said receiver and selectively route said packetized audio signals to one of said addressable loudspeakers using said unique network identification and said router.

31. The surround sound system of claim 27, wherein each of said addressable loudspeakers further comprises a microphone communicatively coupled to said modem.

32. The surround sound system of claim 31, wherein said addressable loudspeakers are further configured to:

measure a test tone emitted by one of said loudspeakers; and
transmit said measured test tone signals to said receiver for system calibration.

33. The surround sound system of claim 27, wherein said receiver is communicatively coupled to one of a video cassette recorder, a digital video disk player, a tape player, a compact disk player, or a phonograph player.

34. The surround sound system of claim 27, wherein said system communication medium further comprises a power line based communication medium.

35. The surround sound system of claim 37, wherein said system communication medium further comprises one of a radio frequency based medium, an infrared signal based medium, a wireless based medium, a phone line based medium, a coaxial cable based medium, or a fiber optic based medium.

36. The surround sound system of claim 26, wherein said content distributor is further configured to:

- receive an audio signal from said receiver;
- generate a user interface; and
- packetize said audio signal based on a selection made from said user interface.

37. The surround sound system of claim 36, wherein said user interface is configured to allow a user to select said audio signal to be selectively routed to one or more of said addressable loudspeakers operating in a selectable mode;

wherein said selectable mode includes one of an OFF mode, a monaural mode, a stereo mode, a surround left mode, or a surround right mode.

38. A home network comprising:

- a means for producing an audio signal;
- a means for distributing said audio signal communicatively coupled to said means for producing an audio signal;
- a means for routing said audio signal;
- a network communication medium communicatively coupling said distribution means and said routing means; and
- a plurality of addressable loudspeakers communicatively coupled to said network communication medium;

wherein each of said addressable loudspeakers are configured to function as a network peripheral in said home network.

39. The home network of claim 38, wherein said addressable loudspeaker further comprises:

- a modem communicatively coupled to said network medium;
- a means for amplifying a signal communicatively coupled to said modem; and
- a speaker communicatively coupled to said signal amplifying means;

wherein said modem is configured to be assigned a unique network identification.

40. The home network of claim 39, wherein said unique network identification comprises one of an Internet protocol (IP) address or an Ethernet address.

41. The home network of claim 40, wherein said content distribution means further comprises a modulator configured to packetize audio signals received from said audio signal producing means.

42. The home network of claim 41, wherein said content distribution means is further configured to route said packetized audio signals to said addressable loudspeakers through said routing means.

43. A surround sound system comprising:

- a receiver;
- a means for distributing audio content communicatively coupled to said receiver;
- a means for routing signals;
- a system communication medium communicatively coupling said content distribution means and said signal routing means; and
- a plurality of addressable loudspeakers communicatively coupled to said system communication medium;

wherein each of said addressable loudspeakers are configured to be independently addressed by said content distribution means.

44. The surround sound system of claim 43, wherein said addressable loudspeaker further comprises:

- a modem communicatively coupled to said system communication medium;
- a means for amplifying a signal communicatively coupled to said modem; and
- a speaker communicatively coupled to said signal amplifier;

wherein said modem is configured to be assigned a unique network identification.

45. The surround sound system of claim 44, wherein said unique network identification comprises one of an Internet protocol (IP) address or an Ethernet address.

46. The surround sound system of claim 45, wherein said content distribution means further comprises a modulator configured to both packetize audio signals received from said receiver and selectively route said packetized audio signals to one of said addressable loudspeakers using said unique network identification and said routing means.

47. A method for transmitting audio data to a loudspeaker comprising:
assigning a unique network identification to said loudspeaker;
receiving an audio signal in a signal distribution component;
packetizing said audio signal; and
routing said packetized audio signal to said loudspeaker using said unique network identification and a router.

48. The method of claim 47, wherein said packetizing said audio signal further comprises forming header information, wherein said header information includes said unique network identification.

49. The method of claim 48, wherein said routing said packetized audio signal to said loudspeaker further comprises:

- introducing said packetized audio signal onto a network;
- receiving said packetized audio signal in a router;
- reading said header information; and

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routing said packetized audio signal to said loudspeaker using said unique network identification.

50. The method of claim 49, wherein said routing said packetized data further comprises transmitting said packetized data over a signal communication medium.

51. The method of claim 50, wherein said signal communication medium comprises a home power line network.